

IN THE CLAIMS:

Please amend claim 1 as follows.

Please add new claim 14.

A complete listing of all the claims is presented as follows:

Claim 1. (Currently Amended).

A process for producing a silicon single crystal, comprising pulling a silicon single crystal from a silicon melt which is contained in a crucible having a crucible wall and having a crucible diameter of at least 450 mm,

placing a heat shield above said crucible; and said silicon single crystal being pulled with a diameter of at least 200 mm; and

exposing the silicon melt to an influence of a traveling magnetic field which exerts a substantially vertically oriented force on the melt in a region of the crucible wall,

said traveling magnetic field being the single type of magnetic field which is applied to the melt.

Claim 2. (Original).

The process as claimed in claim 1,
wherein the silicon single crystal is pulled with an oxygen
concentration of at least $5 * 10^{17}$ atoms per cm³.

Claim 3. (Original).

The process as claimed in claim 1,
wherein the traveling magnetic field exerts a force on the
melt which is primarily directed vertically downward at the
crucible wall.

Claim 4. (Original).

The process as claimed in claim 1,
wherein the traveling magnetic field exerts a force on the
melt which is primarily directed vertically upward at the
crucible wall.

Claim 5. (Withdrawn).

An apparatus for pulling a silicon single crystal comprising
a crucible having a crucible wall and a crucible diameter of
at least 450 mm;
a silicon melt which is contained in the crucible;
a heater device located around the crucible;
a heat shield located above the crucible; and
a device for generating a traveling magnetic field which, in

a region of the crucible wall, exerts a substantially vertically oriented force on the melt.

Claim 6. (Withdrawn) .

The apparatus as claimed in claim 5,
wherein the device which generates the traveling magnetic field is located around the crucible and is further away from the crucible than the heater device.

Claim 7. (Withdrawn) .

The apparatus as claimed in claim 5,
wherein the device which generates the traveling magnetic field is located around the crucible and is closer to the crucible than the heater device.

Claim 8. (Withdrawn) .

The apparatus as claimed in claim 5,
wherein the device for generating the traveling magnetic field comprises at least two coils.

Claim 9. (Withdrawn) .

The apparatus as claimed in claim 5,
wherein the device for generating the traveling magnetic field exerts a force on the melt which is primarily directed vertically downward at the crucible wall.

Claim 10. (Withdrawn).

The apparatus as claimed in claim 5,
wherein the device for generating the traveling magnetic
field exerts a force on the melt which is primarily directed
vertically upward at the crucible wall.

Claim 11. (Withdrawn).

11. An apparatus for pulling a silicon single crystal,
comprising

a crucible having a crucible wall and a crucible
diameter of at least 450 mm;
a silicon melt which is contained in the crucible;
a heater device located around the crucible, and said
heater device being a helical multiphase inductor;
a heat shield located above the crucible; and
the heater device generating a traveling magnetic field
which, in a region of the crucible wall, exerts a substantially
vertically oriented force on the melt.

Claim 12. (Withdrawn).

The apparatus as claimed in claim 11,
wherein the heater device generating the traveling magnetic
field exerts a force on the melt which is primarily directed
vertically downward at the crucible wall.

Claim 13. (Withdrawn).

The apparatus as claimed in claim 11,
wherein the heater device generating the traveling magnetic
field exerts a force on the melt which is primarily directed
vertically upward at the crucible wall.

Claim 14. (New).

A process for producing a silicon single crystal, comprising
pulling a silicon single crystal from a silicon melt which
is contained in a crucible having a crucible wall and having a
crucible diameter of at least 450 mm,
placing a heat shield above said crucible; and said silicon
single crystal being pulled with a diameter of at least 200 mm;
and

exposing the silicon melt to an influence of a traveling
magnetic field which exerts a substantially vertically oriented
force on the melt in a region of the crucible wall; and
the magnetic field is due to three coils which are connected
to a 3-phase power supply, and the traveling magnetic field
which, in the region of the crucible wall, exerts a substantially
vertically oriented force on the melt is generated by suitable
selection of an order of connections; and the connections of the
coils have a phase angle in an order $0^\circ - 60^\circ - 120^\circ$ or $0^\circ - 120^\circ - 240^\circ$.